



Missouri Deer Population Status Report and 2010-2011 Deer Season Summary Prepared by: Jason Sumners and Lonnie Hansen, Resource Scientist Resource Science Division—Missouri Department of Conservation

Population Status

One of the goals of deer regulation liberalizations over the last decade has been to decrease deer numbers in many parts of Missouri. In addition to liberalization of antlerless harvest, an antler point restriction (APR) has been implemented in many counties in an effort to shift harvest pressure from bucks to does (Figure 1). Increased harvest pressure on does should result in fewer does in the population and resulting in fewer does needing to be harvested over time to maintain populations at desirable levels. Over the past several years harvest of does has consistently exceeded antlered buck harvest. The result is a change in the sex ratio of the populations and a projected need to harvest fewer does over time as they make up a smaller portion of the population.

Coupling regulation liberalizations with periodic natural mortality events (Epizootic Hemorrhagic Disease; EHD) has resulted in decreasing deer numbers in a number of counties particularly in central, northern and western Missouri. Prior to 2007, our limited experience with previous widespread hemorrhagic disease outbreaks indicated that the need for regulation changes in response to an outbreak largely depended on habitat quality and deer abundance. It was believed that in counties with low or moderate deer densities regulation restrictions may have to be implemented, whereas in our best deer habitat the impacts might be corrected without a regulation change. This previous experience does not appear to be reflective of deer populations following the 2007 EHD outbreak. We believe that harvest levels, particularly of does, and hunting pressure have remained high and not allowed deer numbers to rebound. In fact, harvest has driven some populations considerably lower, even in areas considered to be good deer habitat with previously high deer densities.

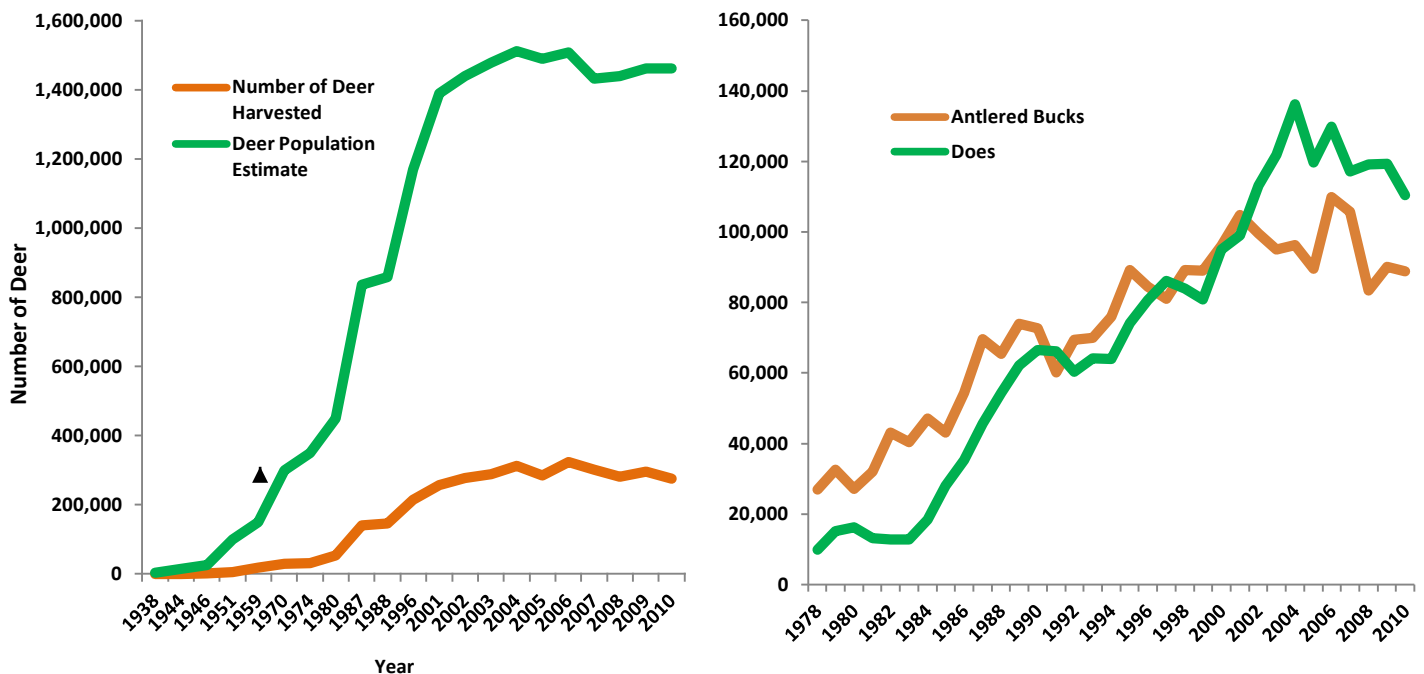


Figure 1. Statewide estimated deer population and total deer harvest from 1938 to 2010 (left). Number of antlered bucks and does in the statewide deer harvest from 1978 to 2010(right).

Lower deer populations are reflected in landowner and hunter attitude concerning deer abundance (Figure 2 & 3). In general, the percentage of hunters and landowners who perceive that there are too few deer has increased in the last 5 years. This increasing dissatisfaction with low population densities combined with the realities of decreased harvest in a number of counties make it prudent to consider future regulation changes in some counties to stabilize deer populations at desirable levels.

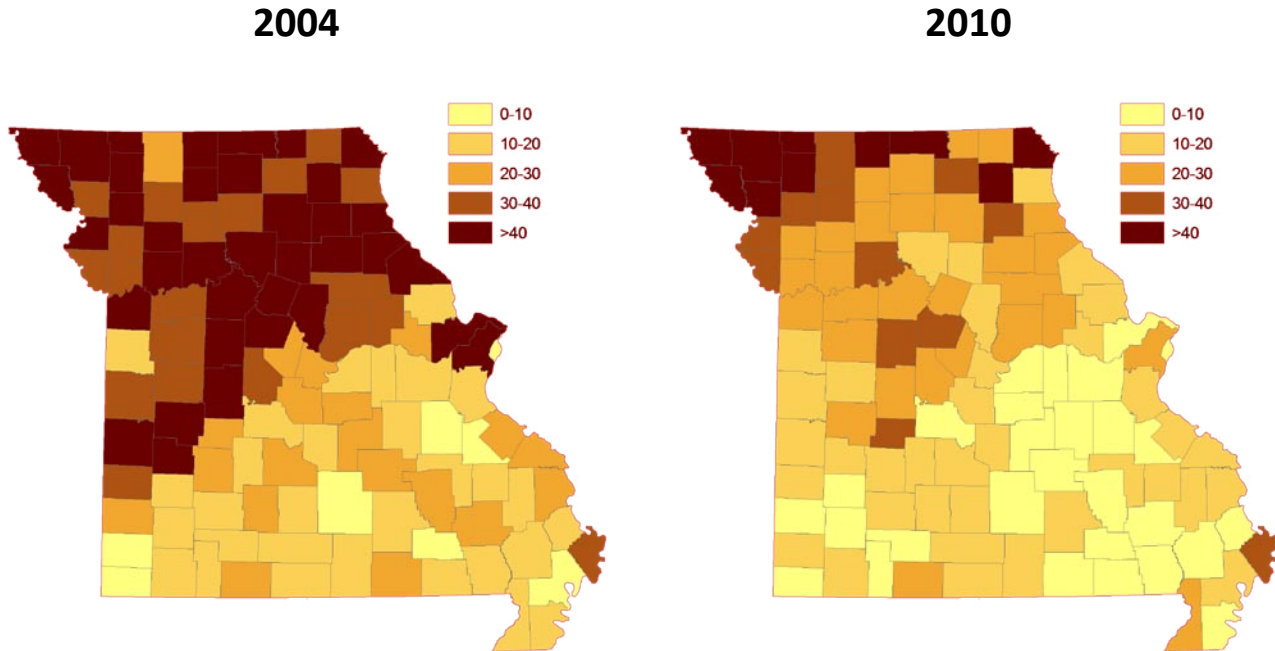


Figure 2. Percentage of production landowners surveyed in 2004 and 2010 that feel there are too many deer.

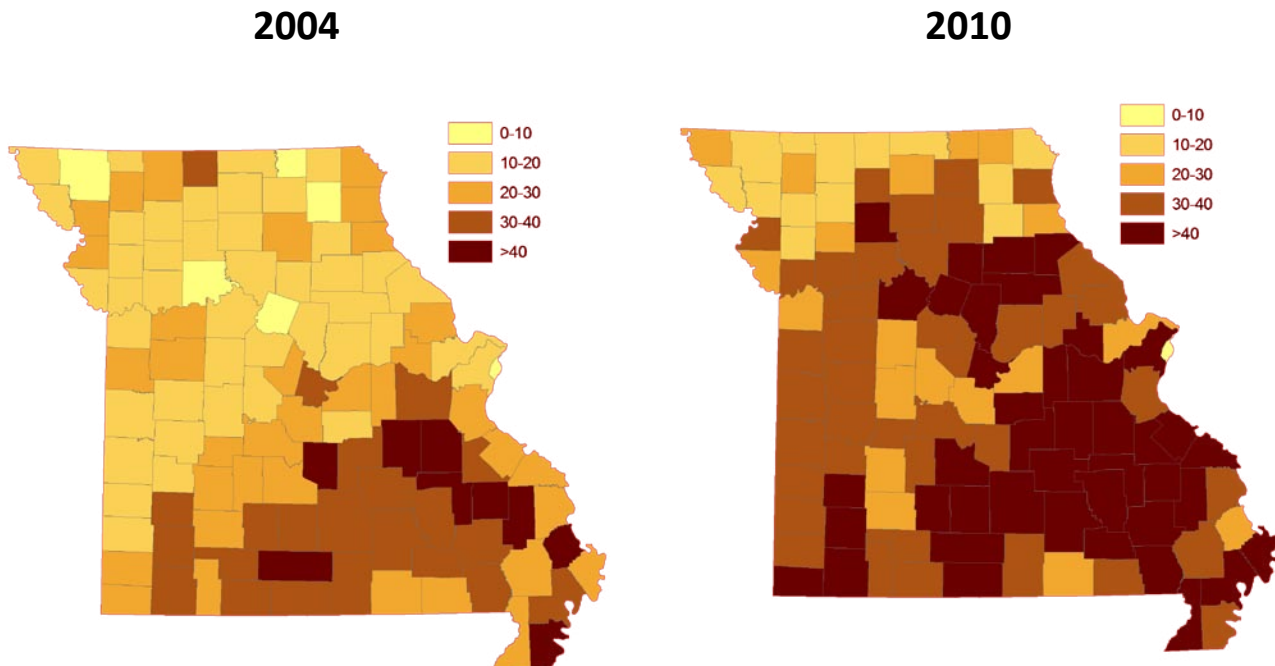


Figure 3. Percentage of hunters surveyed in 2004 and 2010 that feel there are too few deer.

Although there continue to be areas with greater than desirable deer numbers, deer overabundance is much less of an issue in rural Missouri today than it has been in the past. However, the biggest deer management problem area in Missouri and most other states is associated with our cities. Deer are highly adaptable and can thrive in and adjacent to urban settings. Unfortunately, our ability to manage deer through hunting in these settings is often limited by city ordinances prohibiting the discharge of weapons and a lack of hunting access.

We have received an increasing number of complaints from hunters about a lack of deer sightings in 2010, particularly in central Missouri. Some of this can be attributed to an abundant acorn crop in the Ozarks; however, it is also reflective of decreasing deer numbers in many parts of rural Missouri as a result of liberal bag limits and the lingering effects of hemorrhagic disease. Overall rural deer populations appear stable or decreasing in much of Missouri.

The 2010 harvest was affected by several factors:

- Liberalization of deer harvest in recent years has generally resulted in higher doe harvests and, as a result, in many counties across Missouri overall deer populations have stabilized or declined.
- Acorn production in much of Missouri was high in 2010. Abundant mast crops are associated with low deer harvests in the Ozarks because deer tend to be dispersed across the landscape and do not concentrate around openings. This is apparent in the 2010 harvest with most of the decreases over the 2009 hunting season occurring in southern Missouri (Figure 4).
- The 2010 deer season marked the third year of the antler point restriction (APR) for 36 central and western counties. Based on our evaluation of the APR in 2004-2007, harvests are depressed the first year of the APR and recover in following years as the number of legal bucks in the population increases over time.
- In August and September of 2010 hemorrhagic disease affected parts of Howard and Randolph Counties. More widespread outbreaks occurred between 2005 and 2007 with one of the largest and most widespread outbreaks on record occurring in 2007. The effects of these outbreaks are still being felt in some counties.

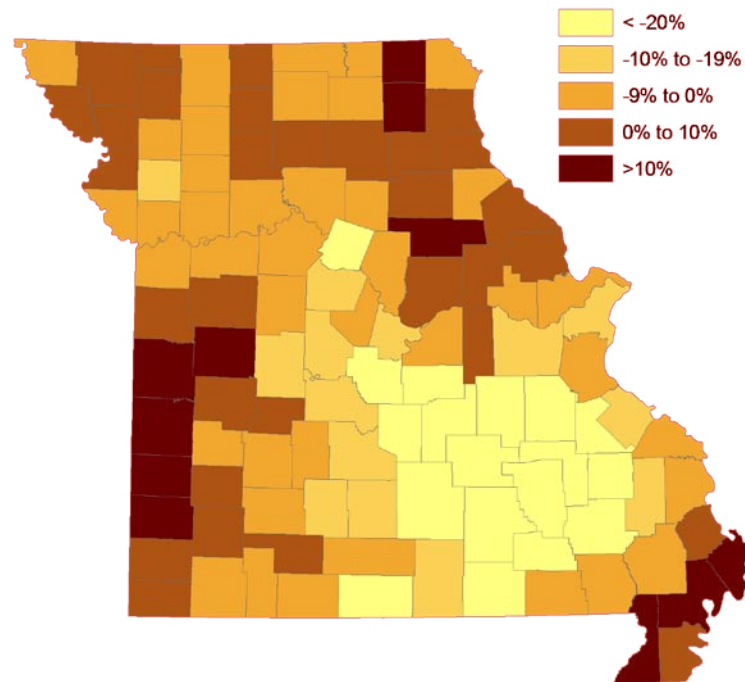


Figure 4. Percent change in total county deer harvest from 2009 to 2010.

2000 Deer Harvest Rates

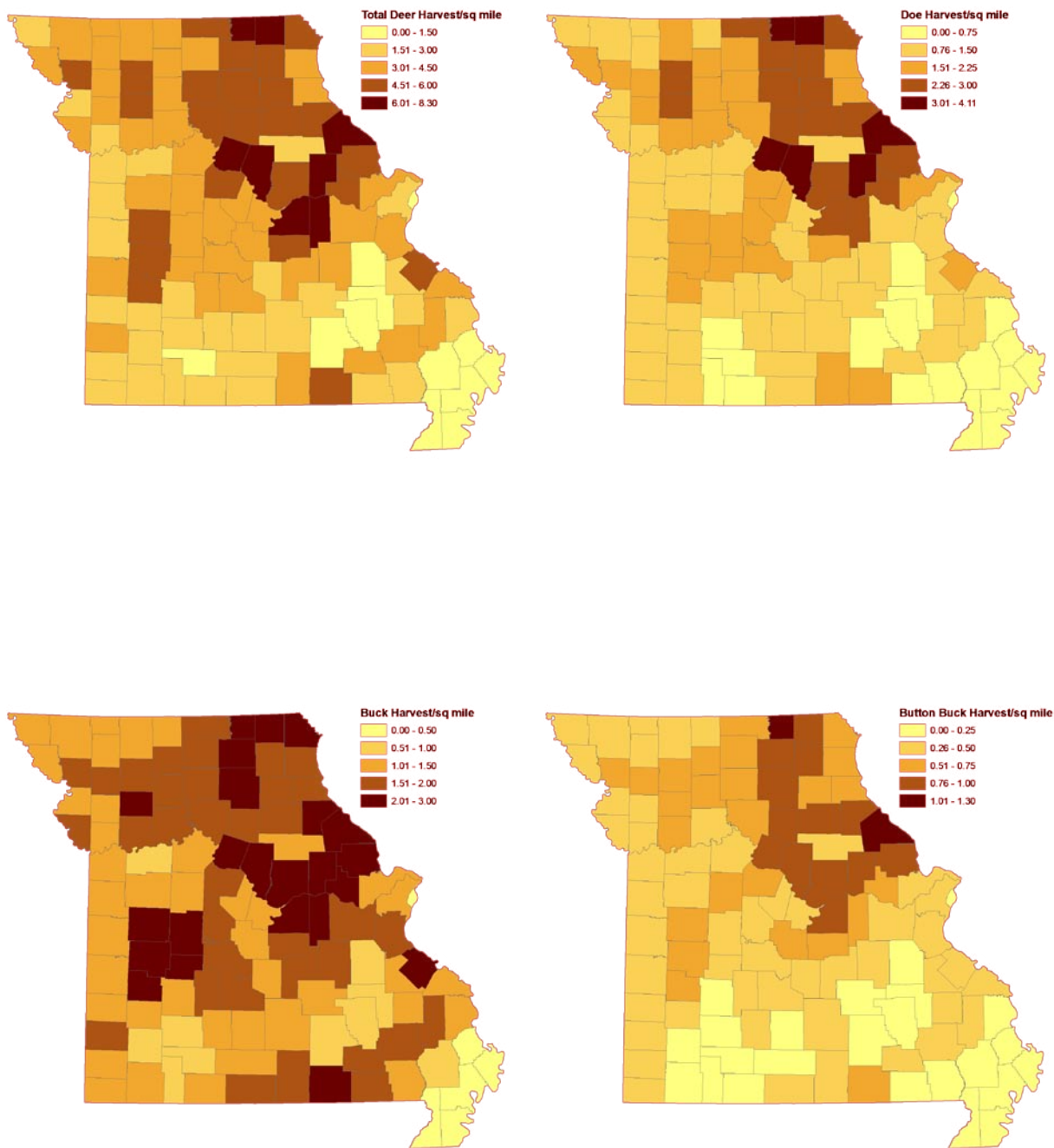


Figure 2. Total, doe, antlered buck and button buck harvest per square mile during the 2000-2001 Deer Hunting Season.

2005 Deer Harvest Rates

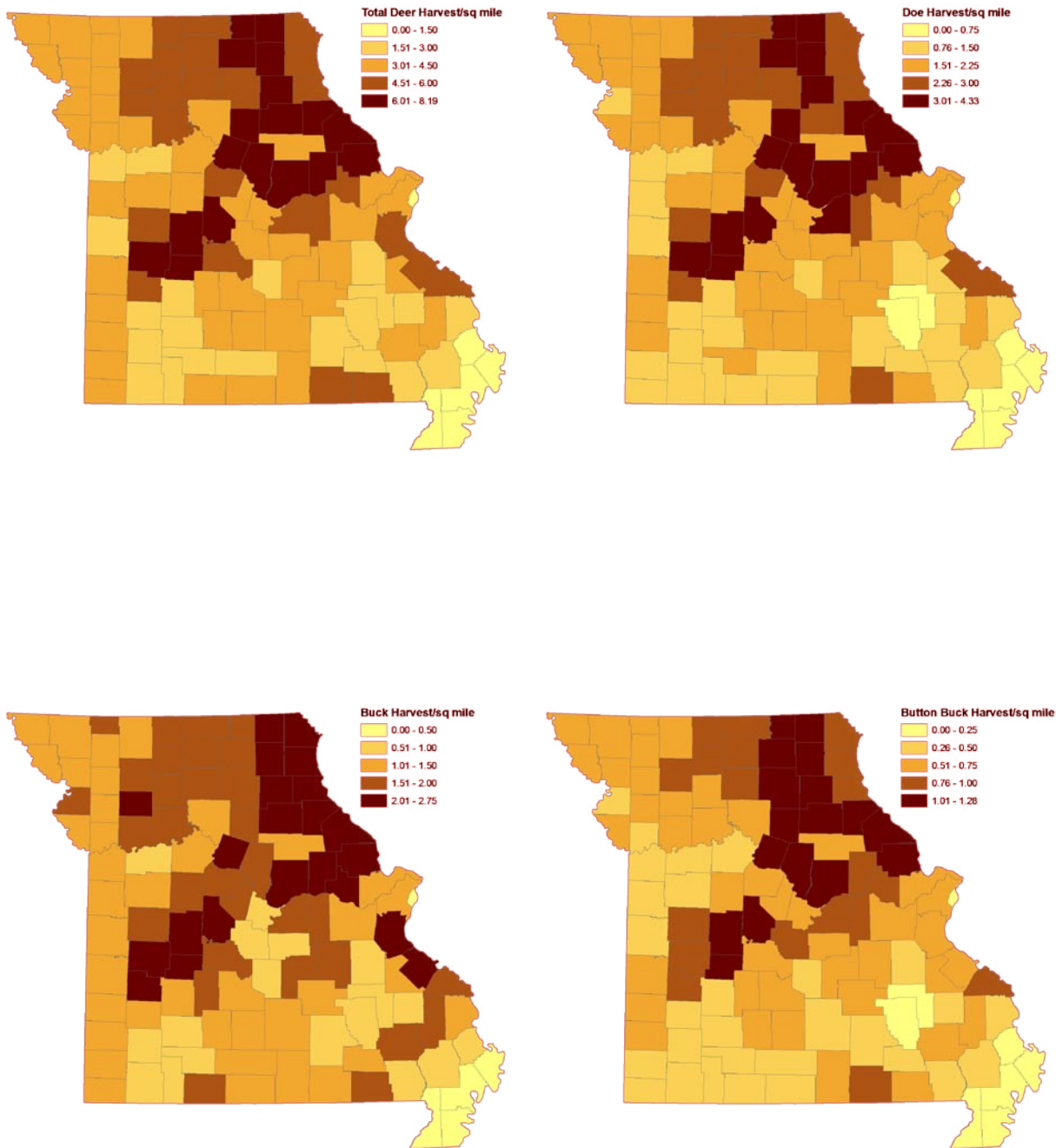


Figure 3. Total, doe, antlered buck and button buck harvest per square mile during the 2005-2006 Deer Hunting Season.

2010 Deer Harvest Rates

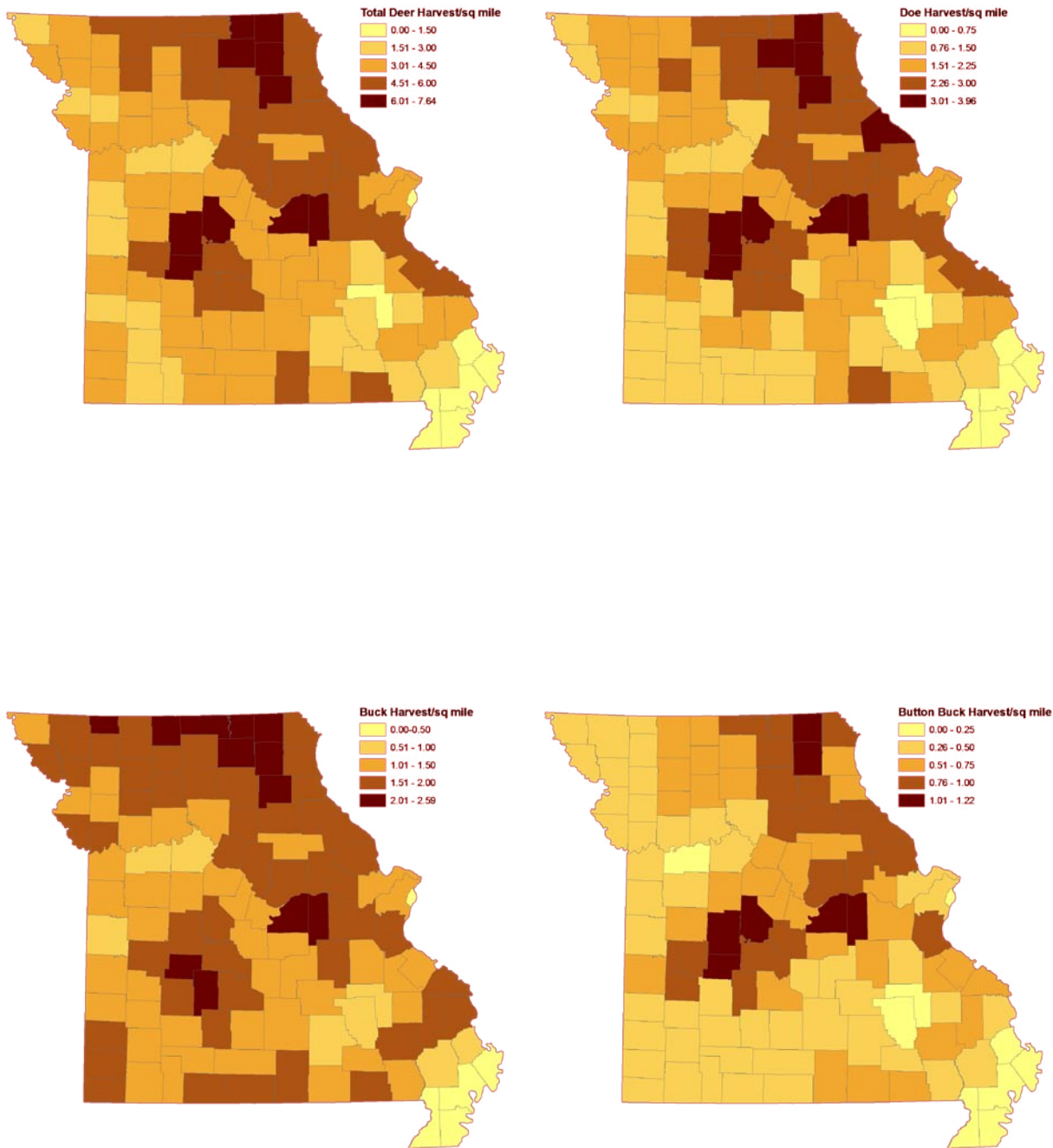


Figure 4. Total, doe, antlered buck and button buck harvest per square mile during the 2010-2011 Deer Hunting Season.

Antler Point Restriction:

An antler point restriction (APR) of 4-points on at least one side was first implemented in 2004 for 29 counties in North and Central Missouri (Old Central, Old North; Figure 5). In 2008, the 4-point antler restriction was expanded to all or part of 66 counties across North and west central Missouri. APR has been successful in reducing yearling buck harvest and increasing recruitment of bucks into older age classes. On average in APR counties 1.5 year old bucks make up 17% of the antlered buck harvest. Two and one-half, 3.5, and ≥ 4.5 make up 50, 25, and 8% of the antlered buck harvest, respectively (Figure 5).

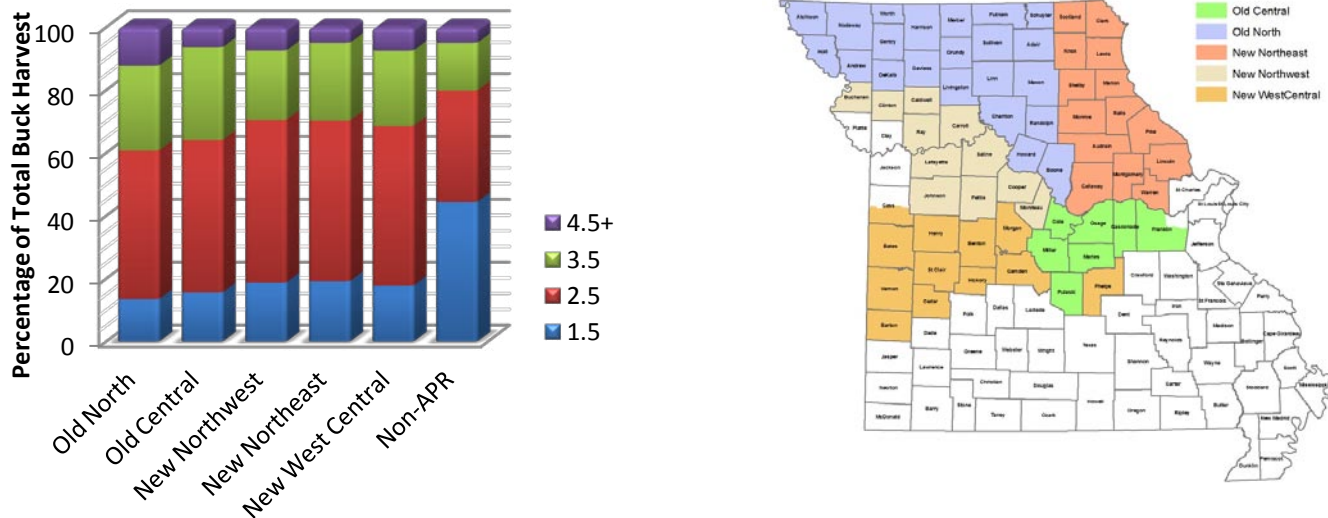


Figure 5. Portion of total antlered buck harvest made of 1.5, 2.5, 3.5, and ≥ 4.5 years old for different regions of Missouri under the 4-point antler restriction and those counties not under antler point restrictions.

We have observed the greatest increase in the harvest of 2.5 year old bucks as a result of the APR. Harvest of bucks ≥ 3.5 years of age is lower in the APR counties added in 2008 because there has only been one cohort of protected yearling bucks recruited into the 3.5 year old age class since implementation of the APR in the new counties. In the next 2 to 3 years it is expected that the harvest of ≥ 3.5 year old bucks will increase as additional bucks are recruited into older age classes.

Chronic Wasting Disease Update

In March of 2010, MDC staff responded to the finding of CWD in a captive big-game shooting area in southeast Linn County by working with landowners in parts of Linn, Macon, and Chariton Counties to collect 153 free-ranging deer from a 5 mile radius around the infected high-fence facility. All 153 samples were negative. During opening weekend of the 2010 November portion of the firearms deer season hunters voluntarily submit 554 samples from adult deer for testing from a 25 mile radius around the infected hunting preserve. Taxidermist collected an additional 213 samples bringing the total number of samples collected with 25 miles of the infected hunting preserve, since March of 2010, to 920 with no detectable CWD prions (Figure 6).

In addition to the sampling within 25-miles of the infected hunting preserve, MDC collected 1987 samples from adult deer from North and West-Central Missouri (Figure 7). In the fall of 2011 additional surveillance will occur in the

remaining half of the state not sampled in 2010. Since 2001, MDC has tested 30,198 free-ranging deer with no detectable CWD prions.

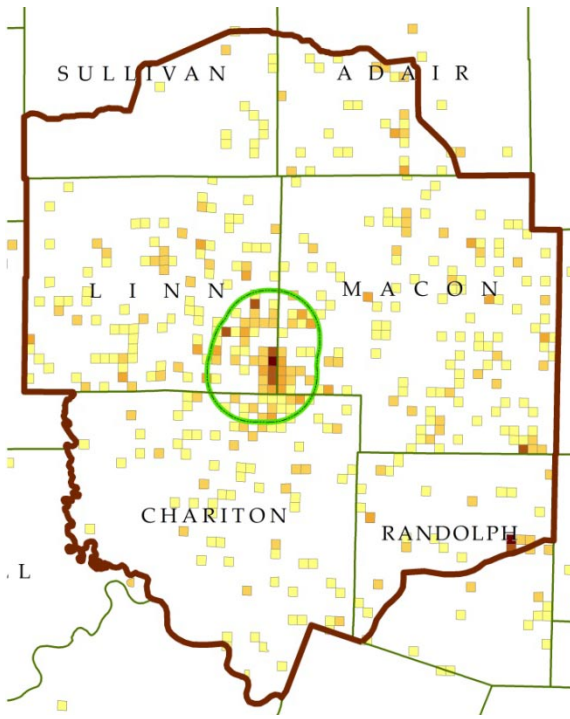


Figure 6. Number of deer tested per section for CWD in 2010. Darker shading indicates greater number of deer sampled per section.

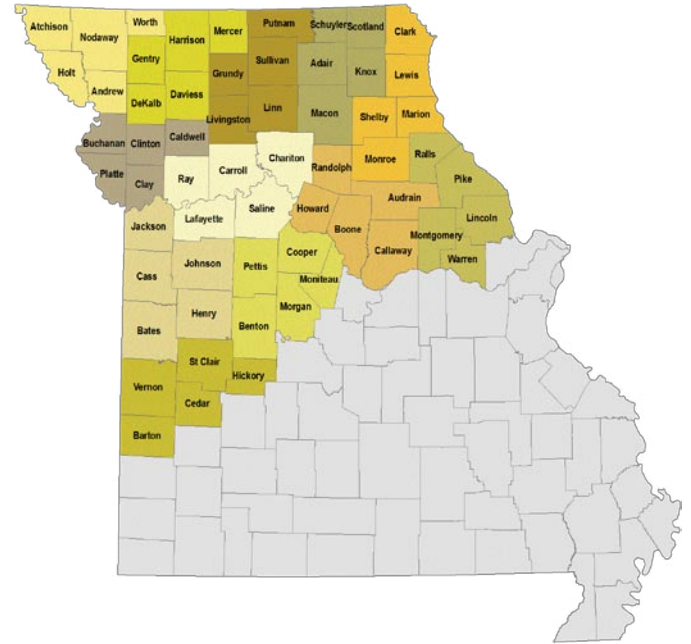


Figure 7. Missouri counties in which free-ranging white-tailed deer were tested for CWD in 2010.

In the winter of 2011 the United States Department of Agriculture in cooperation with the Missouri Departments of Agriculture and Conservation successfully completed depopulated the infected big-game shooting area. Since the winter of 2010 more than 150 cervids from the infected facility were tested for CWD with no additional CWD prions detected.

Since 2001, the MDC has tested more than 36,000 free-ranging white-tailed deer. Statewide and targeted testing of sick deer continues throughout the state.

General Information about the 2010-2011 Deer Season

Season Dates:

Archery Season: September 15 through January 15, closed during the November portion of the firearms deer season

Firearms Season:

Urban Portion: October 8-11

Youth Portion: October 30-31; January 1-2

November Portion: November 13-23

Antlerless Portion: November 24-December 5

Muzzleloader Portion: December 18-28

Bag Limit:

Archery Deer: Archery Deer Hunting permits allows for the taking of two deer of either sex, except that only one antlered deer may be taken before the November portion of the firearms season. Unlimited numbers of additional antlerless deer may be taken on Archery Antlerless Deer Hunting Permits in selected counties

Firearms Deer: Firearms Any-Deer and Antlerless Permits were sold over-the-counter in unlimited quantities. An Any-Deer Permit was valid for one deer of either sex in any county. A Firearms Antlerless Permit was valid for one antlerless deer of either sex in any county. An unlimited number of Firearms Antlerless Permits could be filled in 74 counties (only the urban portion of 3 of these counties), one could be filled in 29 counties (only the rural portion of 3 of these counties) and none could be filled in 14 counties.

Harvest Reporting: Successful hunters are required to report their harvest by 10PM of the day of harvest using Telecheck (telephone or internet)

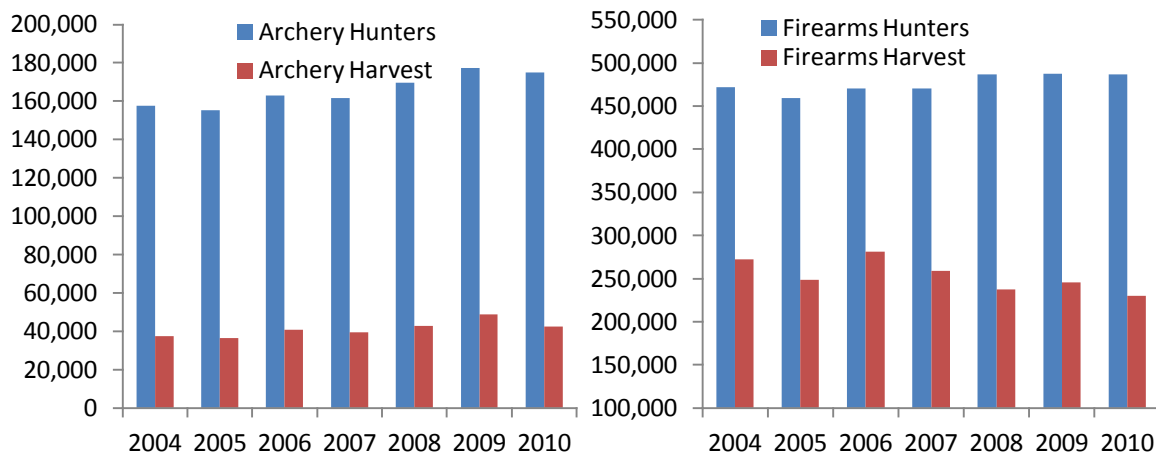


Figure 5. Trends in the number of individuals holding an archery and firearms deer hunting permit and harvest.

Archery Deer Season Summary

There is a long term trend on increasing participation in the archery season and that is reflective in archery season deer harvest numbers. In 2010, archers took 42,372 including 21,467 does, 4,996 button bucks and 15,909 antlered bucks, which was a 14% decrease from 2009 (Table 1). Sale of archery permits decreased by 1% to 100,482; landowner archery

permittees only changed slightly at 79,964 (Table 2). Individual nonresident archers totaled 9,408 which was a 3% increase from 2009. The record for archery harvest was set in 2009 at 49,010 deer harvested. The 2010 harvest is only slightly lower than the total of 42,802 from 2008 and greater than the 39,387 from 2007.

Firearms Deer Season Summary

Resident Firearms Any-Deer and Antlerless Permit sales in 2010 both declined by 1% from those in 2009 (Table 2). Nonresident firearms permittees totaled 16,135, which was similar to the total in 2009 (Table 2). Nonresident firearms hunters purchased a total of 27,788 permits, down 1% from 2009 (Table 2). A total of 487,535 individuals possessed a firearms deer hunting permit in 2010, similar to that in 2009 (Table 3).

Deer harvest during the 2010 firearms season totaled 230,162, a 6% decrease from 2009 (Table 1). This included stable harvest in north and west Missouri (Northwest, Northeast, Kansas City and Southwest regions) and decreased harvest in central and southeast Missouri (Central, St. Louis, Ozark and Southeast regions). Of this total, 109,205 were does, a 9% decrease from that in 2009; 32,986 were button bucks, a 9% decrease; and 87,971 were antlered bucks, a 2% decrease. Harvest by any-deer permittees included 79,108 does, 24,105 button bucks and 63,424 antlered bucks. Harvest by firearms antlerless permittees included 85,023 does and 23,756 button bucks. Firearms landowner permittees took 63,010, which was 27% of the total firearms harvest. Much of the reduction in deer harvest for 2010 from 2009 is a result of a good acorn crop across southern Missouri and lower deer numbers in northern Missouri.

The early and late youth-only portions continue to be popular with 13,369 and 1,301 deer, respectively taken in 2010. The total youth portion harvest in 2010 decreased by 3% from 2009. It consisted of 8,199 antlered bucks, 1,810 button bucks and 4,661 does (Table 1, pg 9). The number of permits sold to youth 15 and younger totaled 71,849 in 2010.

Harvest during the Urban Zones portion decreased from 1,457 in 2009 to 586, a 60% decrease. The muzzleloader portion harvest was 12,945, a 19% decrease from 2009. The antlerless portion harvest was 15,217, a 31% decrease from 2009. Despite the decrease in harvest for both the muzzleloader and antlerless portion, harvest totals for these two portions has increased with the change in timing that occurred following the 2008 deer season.

Managed Deer Hunts

Overall, hunters harvested 2,665 deer during the managed deer hunts in 2010.

Table 1. Deer Season Harvest Summary

Season/Portion	Antlered Deer			Button Bucks			Does			Total		
	2009	2010	% Diff	2009	2010	% Diff.	2009	2010	% Diff.	2009	2010	% Diff.
Archery	16,576	15,909	-4	6,384	4,996	-22	26,050	21,467	-18	49,010	42,372	-14
Urban	10	7	NA	285	114	-60	1,162	465	-60	1,457	586	-60
Early Youth	7,111	7,929	12	1,773	1,570	-11	4,574	3,870	-15	13,458	13,369	-1
November	79,346	76,962	-3	26,926	26,134	-3	85,064	83,648	-2	191,336	186,744	-2
Muzzleloader	3,278	2,655	-19	2,531	1,941	-23	10,106	8,349	-17	15,915	12,945	-19
Antlerless	138	148	NA	4,581	2,987	-35	17,353	12,082	-30	22,072	15,217	-31
Managed Hunts	371	727	96	368	442	20	1,103	1,496	36	1,842	2,665	45
Late Youth	320	270	-16	306	240	-22	1,081	791	-27	1,707	1,301	-24
Total Firearms	90,203	87,971	-2	36,402	32,986	-9	119,340	109,205	-8	245,945	230,162	-6
Total	107,150	104,607	-2	43,154	38,424	-11	146,493	132,168	-10	296,797	275,199	-7

Table 2. Summary of Permit Sales and Harvest by Permit Type

Permit Type	Number of Permits			Number of Deer Harvested		
	2009	2010	% Diff.	2009	2010	% Diff.
Permittee Archery	101,926	100,482	-1	21,312	19,315	-9
Landowner Archery	79,892	79,964	0	6,757	5,380	-20
Youth Archery	5,354	5,880	10	736	618	-16
Permittee Archery Antlerless	44,138	43,029	-3	13,990	12,231	-13
Landowner Archery Antlerless	123,565	123,759	0	5,756	4,318	-25
Youth Archery Antlerless	1,394	1,501	8	258	228	-12
Permittee Firearms Any-Deer	296,198	294,451	-1	73,139	69,076	-6
Landowner Firearms Any-Deer	172,753	175,050	1	38,867	34,480	-11
Youth Firearms Any-Deer	41,514	50,062	21	12,729	15,848	25
Permittee Firearms Antlerless	224,837	221,737	-1	79,134	75,213	-5
Landowner Firearms Antlerless	151,839	156,508	3	31,305	28,530	-9
Youth Firearms Antlerless	20,143	21,787	8	6,594	6,592	0
Resident Firearms	893,196	891,807	0	235,119	218,659	-7
Nonresident Firearms	28,050	27,788	-1	10,533	11,080	5
Resident Archery	347,106	345,127	-1	45,732	39,033	-15
Nonresident Archery	9,167	9,408	3	3,077	3,057	-1
Permittee Archery & Firearms	749,470	743,312	-1	211,776	199,121	-6
Landowner Archery & Firearms	528,049	535,281	1	82,685	72,708	-12

Table 3. Deer Permit and Harvest Facts

	Archery	Firearms	Total ¹
Resident Permittees ¹	98,688	330,157	428,845
Non Resident permittees ¹	7,752	18,118	25,870
Landowners ¹	79,964	175,050	255,014
Total ²	177,061	487,535	507,068
Age Distribution of hunters			
≤ 10	1,452	19,227	-
11-15	9,503	46,168	-
16-40	79,052	184,878	-
≥ 41	87,054	237,262	-
Antlerless permit sales			
1	22,403	133,366	155,769
2	6,147	27,104	33,251
3	1,268	6,366	7,634
≥ 4	825	4,049	4,874
Number of deer taken			
0	144,962	310,322	313,422
1	24,982	137,837	140,859
2	5,323	30,606	37,416
3	1,192	6,265	9,934
≥ 4	602	2,505	5,437
Number of antlered deer taken			
0	161,655	400,118	408,246
1	14,965	87,077	94,231
2	439	337	4,397
3	2	3	194
Percentage taking;			
≥ 1 deer	18.13	36.35	38.19
1 deer	14.11	28.27	27.78
2 deer	3.01	6.28	7.38
≥ 3 deer	1.01	1.80	3.03
Percentage taking:			
1 antlered buck	8.45	17.86	18.58
2 antlered bucks	0.25	0.07	0.87
≥ 3 antlered bucks	0.00	0.00	0.04
Percentage of deer taken by nonresidents	7.2	4.8	5.1
Percentage of deer taken by landowners	22.9	27.4	26.4

¹ Number of any-deer permits issued² Number of individuals, including nonresidents, possessing a permit, not number of permits issue

Table 4. Archery and Firearms harvest totals for the 2010 Missouri Deer Season.

County	Archery				Firearms				Totals			
	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total
Adair	256	50	216	522	1519	477	1096	3092	1775	527	1312	3614
Andrew	92	12	89	193	656	178	723	1557	748	190	812	1750
Atchison	144	23	128	295	569	124	648	1341	713	147	776	1636
Audrain	135	47	87	269	985	333	638	1956	1120	380	725	2225
Barry	159	46	160	365	680	208	816	1704	839	254	976	2069
Barton	155	28	119	302	572	168	545	1285	727	196	664	1587
Bates	143	23	95	261	850	253	655	1758	993	276	750	2019
Benton	294	66	177	537	2134	714	1295	4143	2428	780	1472	4680
Bollinger	200	66	177	443	982	295	1042	2319	1182	361	1219	2762
Boone	356	79	223	658	1313	431	918	2662	1669	510	1141	3320
Buchanan	58	9	62	129	451	133	398	982	509	142	460	1111
Butler	174	57	186	417	566	175	635	1376	740	232	821	1793
Caldwell	133	14	77	224	759	216	589	1564	892	230	666	1788
Callaway	391	107	220	718	2062	629	1321	4012	2453	736	1541	4730
Camden	323	82	195	600	1702	540	991	3233	2025	622	1186	3833
Cape Girardeau	287	58	157	502	616	178	818	1612	903	236	975	2114
Carroll	145	24	103	272	1080	232	935	2247	1225	256	1038	2519
Carter	105	44	128	277	502	154	570	1226	607	198	698	1503
Cass	159	27	137	323	729	210	719	1658	888	237	856	1981
Cedar	120	37	80	237	980	351	622	1953	1100	388	702	2190
Chariton	121	22	102	245	1025	273	793	2091	1146	295	895	2336
Christian	149	38	141	328	551	147	664	1362	700	185	805	1690
Clark	182	45	179	406	1098	340	825	2263	1280	385	1004	2669
Clay	292	52	196	540	419	99	452	970	711	151	648	1510
Clinton	64	15	63	142	528	114	407	1049	592	129	470	1191
Cole	120	31	81	232	628	230	370	1228	748	261	451	1460
Cooper	155	32	87	274	1084	279	736	2099	1239	311	823	2373
Crawford	212	68	162	442	998	315	1008	2321	1210	383	1170	2763
Dade	54	15	56	125	344	122	529	995	398	137	585	1120
Dallas	199	46	171	416	1233	412	986	2631	1432	458	1157	3047
Daviess	181	42	133	356	1232	326	989	2547	1413	368	1122	2903
Dekalb	62	18	64	144	611	172	559	1342	673	190	623	1486

County	Archery				Firearms				Totals			
	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total
Dent	180	42	137	359	1087	318	920	2325	1267	360	1057	2684
Douglas	139	51	134	324	899	278	1022	2199	1038	329	1156	2523
Dunklin	42	9	39	90	107	39	170	316	149	48	209	406
Franklin	371	115	214	700	1746	550	1236	3532	2117	665	1450	4232
Gasconade	244	46	116	406	1631	510	1046	3187	1875	556	1162	3593
Gentry	120	23	123	266	867	213	798	1878	987	236	921	2144
Greene	199	55	204	458	843	242	674	1759	1042	297	878	2217
Grundy	100	20	104	224	813	219	667	1699	913	239	771	1923
Harrison	195	32	230	457	1349	389	1220	2958	1544	421	1450	3415
Henry	214	51	104	369	1565	458	822	2845	1779	509	926	3214
Hickory	192	53	106	351	1427	447	745	2619	1619	500	851	2970
Holt	93	19	102	214	581	121	618	1320	674	140	720	1534
Howard	183	32	109	324	1008	316	707	2031	1191	348	816	2355
Howell	262	55	219	536	1825	556	1330	3711	2087	611	1549	4247
Iron	46	19	55	120	259	93	339	691	305	112	394	811
Jackson	557	103	360	1020	448	121	440	1009	1005	224	800	2029
Jasper	216	46	210	472	616	205	966	1787	832	251	1176	2259
Jefferson	512	123	235	870	1297	393	880	2570	1809	516	1115	3440
Johnson	192	45	107	344	1085	331	793	2209	1277	376	900	2553
Knox	254	66	196	516	1461	477	982	2920	1715	543	1178	3436
Laclede	197	65	189	451	1561	493	1254	3308	1758	558	1443	3759
Lafayette	81	11	48	140	537	146	374	1057	618	157	422	1197
Lawrence	116	37	101	254	451	144	597	1192	567	181	698	1446
Lewis	167	33	117	317	1045	325	744	2114	1212	358	861	2431
Lincoln	325	92	187	604	1460	466	982	2908	1785	558	1169	3512
Linn	272	52	181	505	1270	344	1060	2674	1542	396	1241	3179
Livingston	124	32	112	268	953	255	801	2009	1077	287	913	2277
Macon	372	84	228	684	2054	727	1360	4141	2426	811	1588	4825
Madison	72	16	76	164	410	145	497	1052	482	161	573	1216
Maries	120	35	99	254	901	320	649	1870	1021	355	748	2124
Marion	149	34	111	294	986	298	647	1931	1135	332	758	2225
McDonald	114	25	131	270	541	152	742	1435	655	177	873	1705
Mercer	196	37	210	443	954	299	893	2146	1150	336	1103	2589

County	Archery				Firearms				Totals			
	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total
Miller	177	61	100	338	1204	390	669	2263	1381	451	769	2601
Mississippi	40	2	30	72	84	16	174	274	124	18	204	346
Moniteau	98	23	63	184	636	194	414	1244	734	217	477	1428
Monroe	248	53	166	467	1489	491	988	2968	1737	544	1154	3435
Montgomery	183	58	140	381	1262	382	812	2456	1445	440	952	2837
Morgan	241	54	156	451	1756	585	1014	3355	1997	639	1170	3806
New Madrid	46	9	35	90	65	19	197	281	111	28	232	371
Newton	211	34	203	448	647	204	861	1712	858	238	1064	2160
Nodaway	184	24	182	390	1361	327	1232	2920	1545	351	1414	3310
Oregon	249	66	179	494	1639	479	932	3050	1888	545	1111	3544
Osage	312	52	210	574	1902	585	1178	3665	2214	637	1388	4239
Ozark	153	33	143	329	815	230	1017	2062	968	263	1160	2391
Pemiscot	13	1	22	36	30	5	66	101	43	6	88	137
Perry	172	35	99	306	963	290	853	2106	1135	325	952	2412
Pettis	187	29	125	341	1239	357	820	2416	1426	386	945	2757
Phelps	173	51	102	326	891	268	647	1806	1064	319	749	2132
Pike	316	56	191	563	1839	546	1164	3549	2155	602	1355	4112
Platte	318	68	197	583	538	117	510	1165	856	185	707	1748
Polk	139	34	115	288	642	198	914	1754	781	232	1029	2042
Pulaski	179	33	93	305	648	190	518	1356	827	223	611	1661
Putnam	254	46	241	541	1176	351	1000	2527	1430	397	1241	3068
Ralls	166	36	138	340	997	338	736	2071	1163	374	874	2411
Randolph	179	28	137	344	1261	365	807	2433	1440	393	944	2777
Ray	105	13	75	193	837	236	686	1759	942	249	761	1952
Reynolds	80	23	105	208	463	138	514	1115	543	161	619	1323
Ripley	275	71	192	538	1091	356	928	2375	1366	427	1120	2913
Saint Charles	277	61	202	540	739	214	636	1589	1016	275	838	2129
Saint Clair	241	65	137	443	1733	535	993	3261	1974	600	1130	3704
Saint Francois	161	47	101	309	548	182	534	1264	709	229	635	1573
Saint Louis	523	123	297	943	381	101	309	791	904	224	606	1734
Sainte Genevieve	210	36	70	316	1076	275	659	2010	1286	311	729	2326
Saline	126	29	86	241	833	213	635	1681	959	242	721	1922
Schuyler	109	23	100	232	774	274	595	1643	883	297	695	1875

County	Archery				Firearms				Totals			
	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total	Doe	Button Buck	Antlered Buck	Total
Scotland	313	71	226	610	1427	408	909	2744	1740	479	1135	3354
Scott	48	13	40	101	179	64	227	470	227	77	267	571
Shannon	130	43	114	287	841	258	745	1844	971	301	859	2131
Shelby	270	60	164	494	1386	410	850	2646	1656	470	1014	3140
Stoddard	238	63	170	471	520	193	494	1207	758	256	664	1678
Stone	108	24	88	220	399	117	491	1007	507	141	579	1227
Sullivan	260	59	217	536	1312	382	1069	2763	1572	441	1286	3299
Taney	151	50	137	338	757	218	924	1899	908	268	1061	2237
Texas	255	61	217	533	1530	437	1546	3513	1785	498	1763	4046
Vernon	231	52	145	428	1274	389	832	2495	1505	441	977	2923
Warren	176	32	113	321	834	276	643	1753	1010	308	756	2074
Washington	91	26	107	224	624	190	714	1528	715	216	821	1752
Wayne	219	83	210	512	1007	348	1056	2411	1226	431	1266	2923
Webster	167	42	149	358	795	252	890	1937	962	294	1039	2295
Worth	78	13	104	195	457	114	490	1061	535	127	594	1256
Wright	151	46	131	328	809	261	812	1882	960	307	943	2210
Northwest	2,467	444	2,244	5,155	16,353	4,285	14,506	35,144	18,820	4,729	16,750	40,299
Northeast	3,495	744	2,627	6,866	19,824	6,209	13,772	39,805	23,319	6,953	16,399	46,671
Kansas City	2,909	592	1,828	5,329	12,551	3,730	8,705	24,986	15,460	4,322	10,533	30,315
Central	3,164	768	1,972	5,904	18,907	5,937	12,098	36,942	22,071	6,705	14,070	42,846
St. Louis	2,487	640	1,517	4,644	8,079	2,505	6,408	16,992	10,566	3,145	7,925	21,636
Southwest	2,646	675	2,360	5,681	13,039	4,080	13,220	30,339	15,685	4,755	15,580	36,020
Ozark	2,251	596	1,789	4,636	12,577	3,785	10,987	27,349	14,828	4,381	12,776	31,985
Southeast	2,048	537	1,572	4,157	7,875	2,455	8,275	18,605	9,923	2,992	9,847	22,762
GRAND TOTAL	21,467	4,996	15,909	42,372	109,205	32,986	87,971	230,162	130,672	37,982	103,880	272,534